General Samuel C. Phillips Inducted 1998



General Samuel C. Phillips played a prominent role in America's early space and missile programs. Born in Springerville, Arizona, in 1921, Phillips graduated from the University of Wyoming with a degree in electrical engineering in 1942. During World War II, Phillips was assigned to the 364" Fighter Squadron of Eighth Air Force, where he flew P-38s and P-515 in the European theater, earning two Distinguished Flying Crosses, eight Air Medals and the French Croix de Guerre.

Phillips earned a Master's degree in electrical engineering at the University of Michigan in 1950. This was followed by his participation in atomic tests in the Pacific, and work on the B-52, Falcon and BOMARC weapon systems. As Director of Materiel for Strategic Air Command's 7th Air Division from 1956 to 1959, Phillips was instrumental in arranging forward-basing for the Thor Intermediate Range Ballistic Missile in Great Britain.

From 1959 to 1963 Phillips was Director of the Minuteman program, completing Minuteman's development and transitioning it to operational use. His work on the Minuteman included overseeing the development of the reliable integrated circuit technology which serves as the foundation *of* many of today's electronic systems. He then served briefly as the Vice Commander of Ballistic Systems Division at Norton AFB, California.

In 1964 the National Aeronautics and Space Administration "borrowed" him from the Air Force for NASA's most important mission of the 1960s-the Apollo Manned Lunar Landing program. General Phillips, Deputy Director of the Apollo program in NASA's Office of Manned Spaceflight, led a government-industry team of more than 400,000 people through the Apollo 11 mission that put the first men on the moon on 20 July1969.

Recognizing this outstanding achievement, the Smithsonian Institution awarded General Phillips the Langley Medal. As the fourteenth recipient, General Phillips entered the select company of such aerospace luminaries as the Wright brothers and rocket pioneer Robert Goddard. Dr. Wernher von Braun, director of NASA's Marshall Space Flight Center, credited General Phillips with pulling together the many pieces of the Apollo program and making it work.

Returning to the Air Force, General Phillips served as the commander of the Space and Missile Systems Organization from 1969 to 1972 where he led the studies that defined the follow-on to the Minuteman program as well as began implementation of the Air Force's participation in the Shuttle program. In 1971 he was elected to the National Academy of Engineering in recognition of his continuing leadership of advanced technological programs. He received the 1972 General Thomas D. White Space Trophy as the Air Force member making the most outstanding contribution to U.S. progress in aerospace. After heading the National Security Agency where he focused his attention on reinvigorating the organization's research and development programs, General Phillips became commander of Air Force Systems Command in 1973. There he managed the development of many Air Force weapon systems including the F-15 and F-16 fighters, the B-1 bomber, the AWACS, and the Peacekeeper Intercontinental Ballistic Missile.

After his retirement from the Air Force in 1975, General Phillips went to work in private industry, managing the Defense Systems Group of TRW. He served as a management consultant to NASA during the 1986 investigation of the *Challenger* disaster. At the time of his death in 1990, Phillips was a member of the National Research Council's Committee for the Human Exploration of Space.

In addition to his election to the National Academy of Engineering, General Phillips was honored as a fellow of the American Institute of Aeronautics and Astronautics, and his achievements were recognized by the Institute of Electrical and Electronic Engineers and the American Astronautical Association. In addition, the University of Wyoming honored him with the presentation of an Honorary Doctor of Laws degree. General Phillips died on 31 January 1990.